

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

Claims 1-4 (canceled).

Claim 5 (currently amended): An acicular body comprising at least one oxide of at least one metal selected from the group consisting of ~~Group IIIA of the Periodic Table of the Elements~~ gallium, indium, thallium, rare earth metals, and mixtures thereof; said acicular body having a polygonal cross section and a cross-sectional dimension less than about 20 μm .

Claim 6 (previously presented): An acicular body comprising at least one oxide of at least one metal selected from the group consisting of scandium, yttrium, lanthanum, thallium, cesium, praseodymium, neodymium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, lutetium, and mixtures thereof; said acicular body having a polygonal cross section and a cross-sectional dimension less than about 20 μm .

Claim 7 (withdrawn): A method for producing acicular bodies of at least one inorganic compound of a metal comprising the steps of:

preparing a solution of a precursor of said inorganic compound of said metal to obtain a first solution;

preparing a solution of an ester of a dicarboxylic acid to obtain a second solution;

adding said first solution in increments into said second solution to form a mixed solution and to obtain an acicular-shaped precipitate of an organic salt of said metal from said mixed solution;

separating said precipitate from said mixed solution;

drying said separated precipitate; and

firing said dried precipitate in an oxidizing atmosphere at a temperature for a time sufficient to convert said organic salt of said metal to acicular bodies of said inorganic compound of said metal;

wherein said metal is selected from the group consisting of Groups IB, IIA, IIB, IIIA, IIIB, IVA, IVB, VA, VB, VIA, VIB, VIIA, VIIB, VIIIA, and rare earth metals of the Periodic Table, and mixtures thereof.

Claim 8 (withdrawn): The method according to claim 7, wherein said at least one compound of said metal is an oxide of said metal.

Claim 9 (withdrawn): The method according to claim 7, wherein said precursor of said inorganic compound of said metal is soluble in water.

Claim 10 (withdrawn): The method according to claim 7, wherein said first solution is an acidic solution comprising an acid selected from the group consisting of hydrochloric acid, nitric acid, sulfuric acid, citric acid, acetic acid, and mixtures thereof.

Claim 11 (withdrawn): The method according to claim 7, wherein said dicarboxylic acid is selected from the group consisting of oxalic acid, malonic acid, succinic acid, glutaric acid, and mixtures thereof.

Claim 12 (withdrawn): The method according to claim 11, wherein said ester is selected from the group consisting of methyl, ethyl, propyl, dimethyl, diethyl, dipropyl esters, and mixtures thereof.

Claim 13 (withdrawn): The method according to claim 7, wherein said ester is selected from the group consisting of dimethyl oxalate, diethyl oxalate, and mixtures thereof.

Claim 14 (withdrawn): The method according to claim 7, wherein said inorganic compound of said metal is an oxide of said metal.

Claim 15 (withdrawn): The method according to claim 7, wherein said drying is carried out above a boiling point of a liquid of said mixed solution for a time sufficient substantially to remove a liquid from said precipitate.

Claim 16 (withdrawn): The method according to claim 7, wherein said firing is carried out at a temperature from about 400 °C to about 1400 °C.

Claim 17 (withdrawn): The method according to claim 7, wherein said firing is carried out for about 4 hours.

Claim 18 (withdrawn): The method according to claim 7, wherein said oxidizing atmosphere is selected from the group consisting of air, oxygen, carbon dioxide, mixtures of oxygen and at least one inert gas, and mixtures thereof.

Claim 19 (withdrawn): A method for producing acicular bodies of at least one inorganic compound of a metal comprising the steps of:

preparing a solution of a precursor of said inorganic compound of said metal to obtain a first solution;

preparing a solution of an ester of a dicarboxylic acid to obtain a second solution;

adding said first solution in increments into said second solution to form a mixed solution and to obtain an acicular-shaped precipitate of an organic salt of said metal from said mixed solution;

separating said precipitate from said mixed solution;

drying said separated precipitate; and

firing said dried precipitate in an oxidizing atmosphere at a temperature for a time sufficient to convert said organic salt of said metal to acicular bodies of said inorganic compound of said metal;

wherein said metal is selected from the group consisting of Groups IIA, IIIA, IIIB, rare earth metals of the Periodic Table, and mixtures thereof.

Claim 20 (withdrawn): A method for producing acicular bodies of at least one inorganic compound of a metal comprising the steps of:

preparing a solution of a precursor of said inorganic compound of said metal to obtain a first solution;

preparing a solution of an ester of a dicarboxylic acid to obtain a second solution;

adding said first solution in increments into said second solution to form a mixed solution and to obtain an acicular-shaped precipitate of an organic salt of said metal from said mixed solution;

separating said precipitate from said mixed solution;

drying said separated precipitate; and

firing said dried precipitate in an oxidizing atmosphere at a temperature for a time sufficient to convert said organic salt of said metal to acicular bodies of said inorganic compound of said metal;

wherein said metal is selected from the group consisting of scandium, yttrium, lanthanum, aluminum, gallium, indium, thallium, cesium, praseodymium, neodymium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, lutetium, and mixtures thereof.

Claim 21 (withdrawn): A composite ceramic body comprising a ceramic matrix and acicular bodies of at least one inorganic compound of a metal selected from the group consisting of Groups IB, IIA, IIB, IIIA, IIIB, IVA, IVB, VA, VB, VIA, VIB, VIIA, VIIB, VIIIA, rare earth metals of the Periodic Table, and mixtures thereof; said acicular bodies being embedded in said ceramic matrix.

Claim 22 (withdrawn): A composite ceramic body comprising a ceramic matrix and acicular bodies of at least one inorganic compound of a metal selected from the group consisting of Groups IIA, IIIA, IIIB, IVA, rare earth metals of the Periodic Table, and mixtures thereof; said acicular bodies being embedded in said ceramic matrix.

Claim 23 (withdrawn): A composite ceramic body comprising a ceramic matrix and acicular bodies of at least one inorganic compound of a metal selected from the group consisting of

scandium, yttrium, lanthanum, aluminum, gallium, indium, thallium, cesium, praseodymium, neodymium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, lutetium, and mixtures thereof; said acicular bodies being embedded in said ceramic matrix.

Claim 24 (withdrawn): The composite ceramic body according to claim 23, wherein said ceramic matrix and said acicular bodies have a same composition.

Claim 25 (withdrawn): The composite ceramic body according to claim 24, wherein said composite ceramic body comprises a scintillator of a computed tomography x-ray system.

Claim 26 (withdrawn): A composite ceramic body comprising a polycrystalline alumina matrix and acicular bodies of alumina embedded therein.

Claim 27 (withdrawn): A composite ceramic body comprising a polycrystalline silica matrix and acicular bodies of silica embedded therein.

Claim 28 (withdrawn): A light pipe for transporting light, said light pipe comprising acicular bodies of at least one scintillating material.

Claim 29 (withdrawn): A composite ceramic body comprising a ceramic matrix and acicular bodies of a least one inorganic compound, wherein said acicular bodies substantially align in direction of their longer axes.

Claim 30-33 (canceled).

Claim 34 (currently amended): An acicular body comprising at least one ~~compound~~ oxide of a rare earth metal; said acicular body having a polygonal cross section and a cross-sectional dimension less than about 20 μm .